Challenge TB – Democratic Republic of Congo
Year 2

Annual Report-PEPFAR

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Cover photo: Staff contracts CTB MSH and NGOs (Photo credit: Jean Ngoy TA TB CTB)

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Table of Contents

Contents

List of Tables

List of Figures

List of Abbreviations and Acronyms

ART	Antiretroviral therapy
ARV	Antiretroviral
ATS	American Thoracic Society
BPC	Bureau provincial de Coordination du PNLS
BCZS	Bureau central de la zone de santé
CAD	Club des Amis Damien
CDC	Centers for Disease Control
CDR	Central de distribution régionale des médicaments
CS	Centre de santé
Cordaid	Catholic Organization for Relief and Development Aid
CTX	Cotrimoxazole
CPLT	Coordination Provinciale Lèpres Tuberculose /Provincial coordination areas of the National Leprosy and TB Program
CPT	Cotrimoxazole preventive therapy
CTB	Challenge TB
CSDT	Centre de Santé de diagnostic et Traitement de la tuberculose
CST	Centre de santé et de traitement
DPS	Division Provinciale de Santé/
DCIP	Conseil et dépistage initié par le prestataire
DRC	Democratic Republic of Congo
DOT	Direct observed treatment
EGPAF	Elizabeth Glaser Paediatric Aids Foundation
FFPlus	Fondation Femmes Plus
HZ	Health zone
HIV	Human immunodeficiency virus
IHP+	Integrated health project plus
ICAP	International Center for AIDS Care and Treatment Program
IP	Implementing Partner
IPS	Inspection Provincial de Santé/Provincial Heath inspection
IPT	Isoniazid preventive therapy
INH	Isoniazid
IRD	International Relief and Development
IT	Infirmier Titulaire
JATA	Japan Anti-Tuberculosis Association
KIN	Kinshasa
KNCV	KNCV Tuberculosis Foundation
LLB	Lualaba/Provincial Coordination of the National Leprosy and TB Program of Katanga West
HKT	Haut-Katanga/Provincial Coordination of the National Leprosy and TB Program Of Katanga South
LNAC	Ligue nationale antituberculeuse et anti-lépreuse du Congo/National League Against Tuberculosis and Leprosy

MDR-TB	Multidrug-resistant tuberculosis
MoH	Ministry of Health
MSH	Management Sciences for Health
NTP	National TB Program
NGO	Non-governmental organization
OAC	Organisation à assise communautaire
PATH	Program for Appropriate Technology in Health
PEC	Prise en charge
PEPFAR	President's Emergency Plan for AIDS Relief
PLHIV	People living with HIV
PODI	Point of distribution for antiretroviral therapy
PNLS	Programme National de Lutte contre le Sida/ National AIDS Control Program
PNLT	Programme National de Lutte contre la Tuberculose/ National Tuberculosis Program
ProVIC+	Programme de VIH Intégré au Congo plus/Integrated HIV Program of Congo
RDQA	Routine Data Quality Assessment
SCMS	Supply Chain Management System
TB	Tuberculosis
TPI	Isoniazid Prophyliaxis
The Union	International Union against Tuberculosis and Lung Disease
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
HIV	Human immunodeficiency virus
WHO	World Health Organization
XDR-TB	Extensively drug resistant TB

1. Executive Summary

Challenge TB (CTB) is the flagship global mechanism for implementing the tuberculosis (TB) strategy of the United States Agency for International Development (USAID). The project also contributes to TB/HIV activities under the US President's Emergency Plan for AIDS Relief (PEPFAR). CTB collaborates with national and international initiatives in providing global leadership and support for national TB control efforts. CTB, led by the KNCV Tuberculosis Foundation (KNCV), is a USAID-funded five-year global program to decrease TB mortality and morbidity in high-burden countries. The program is implemented by a consortium of nine partners led by KNCV: the American Thoracic Society (ATS), FHI 360, Interactive Research & Development (IRD), Japan Anti-Tuberculosis Foundation (JATA), and Management Sciences for Health (MSH), PATH, The International Union Against Tuberculosis and Lung Disease (The Union), and the World Health Organization (WHO).

In the Democratic Republic of Congo (DRC), The Union acts as the technical lead for CTB, responsible for overseeing the successful implementation of the project, and coordinating with the partners at the national and international level. MSH is a collaborating partner in the implementation of TB/HIV activities in three provinces: Haut-Katanga (Lubumbashi), Lualaba (Kolwezi), and Kinshasa (KIN), all funded under PEPFAR.

At the community level, the project works with three local nongovernmental organizations (NGOs) through subcontracts. These NGOs include Club des Amis de Damien (CAD), La Ligue Nationale Anti-Tuberculeuse et Anti-Lepreuse au Congo (LNAC), La Fondation Femmes Plus (FFPlus). All three NGOs work with communities in TB care.

At the end of the second year, the main achievements include:

1) Joint TB and HIV coordination

Five TB/HIV working groups have been created, including three in the Haut-Katanga and Lualaba provinces and two additional working groups in KIN (TB/HIV working group at the national level and that of USAID PEPFAR IPs). In the reporting year, CTB and the working groups listed above organized nine quarterly TB/HIV meetings. The purpose of these quarterly meetings was to develop joint TB/HIV plans, to assess the implementation plan, to discuss the implementation methods of collaborative TB/HIV activities and to analyze the results to reschedule activities to be carried out next quarter.

Results of meetings

- A national TB/HIV roadmap was developed by PNLT and PNLS with technical inputs from CTB
- Drawing from the national TB/HIV roadmap, three joint TB / HIV workplans were developed in the provinces of Upper Katanga, Kinshasa and Lualaba Nine maps were created documenting the quarterly progress of joint TB/HIV activities in KIN, Haut-Katanga and Lualaba
- Nine quarterly TB/HIV progress meetings were conducted in KIN, Haut-Katanga and Lualaba on the implementation of the work plan

- Nine lists of recommendations for the implementation of activities were created at the provincial level
- Joint trainings were conducted for 524 health care workers (276 males, 248 females)
    - 358 individuals were trained with IP financial support from IHP+ (36) and ProVIC+ (312) by a joint PNLT and PNLS team
    - 35 community members were trained in technical awareness

2) Community based care and support services

Through small awareness campaigns and contact investigation by the NGOs, 697 new TB cases new were detected. One hundred percent of the cases were diagnosed with bacteriologically confirmed pulmonary TB. Fifty of these cases were TB/HIV cases who were identified through a door-to-door approach between April and September 2016.

Through the efforts of local NGOs (LNAC, CAD and FFPlus), between April and September 2016:

- 811 home visits were conducted (contact investigation, identification of lost-to-follow up patients and the tracking of patients who were irregularly coming to the health facilities to receive their medication)
- 697 patients were detected
- 259 visits were conducted to 127 patients who were identified as lost-to-follow up by health facilities
    - As a result of these visits, 84 patients resumed treatment
- 84 visits to TB patients who didn't attend health facilities regularly were conducted

3) Isoniazid Preventive Therapy for PLHIV

During year two of the project, 3,722 PLHIV were put on Isoniazid preventative therapy (IPT) (in year 1, there were no PLHIV on IPT).

4) Performance Monitoring and Evaluation

During year 2:

- Joint TB/HIV supervisory visits were made to 137 sites at the provincial level. The PNLT, PNLS, DPS and CTB found that TB/HIV performance was weak between April and September 2016. In total, three quarterly supervision visits were made to Haut-Katanga, two visits were made to Kinshasa and to Lualaba
- Between August and September 2016, The Routine Data Quality Assessment (RDQA) was provided in two provinces (Lualaba and Haut-Katanga). Twelve support sites (63% of the total number of sites) in the six HZs in the two provinces of Haut-Katanga and Lualaba, participated in an RDQA. The result of the RDQA showed that there was a large gap between the data from the sites and the data available to the CPLT, BPC/PNLS and among IPs. In an effort to address this gap, TB/HIV data validation meetings should be held at all levels.
- There were three quarterly TB/HIV data validation meetings in KIN, Haut-Katanga and Lualaba

- The CPLT, BPC and CTB staff conducted a TB infection control assessment at 206 locations. None of the sites had a written up-to-date TB Infection control plan. The staffs are preparing a development scheme which will be presented to USAID by the end of December 2016.

2. Introduction

The Democratic Republic of Congo (DRC), located in Central Africa, is about two-thirds the size of Western Europe and has an estimated 77 million inhabitants, 70% of whom are under the age of 25. DRC borders nine countries: The Republic of Congo to the west; Uganda, Burundi, Rwanda, and Tanzania to the east; the Central African Republic and the Republic of South Sudan to the north; and Zambia and Angola to the south (See Figure 1, below).

Figure 1: DRC and its 26 provinces, May 2015

Conflict and political instability over the past two decades has slowed development in the DRC. Over 87% of the population lives on less than US $1.26 a day, and the per capita gross domestic product is one of the lowest in the world ($462.6). The UN Human Development Index (2014) ranked DRC 186 among 187 countries. The country is socially and economical burdened by TB and HIV. With more than 100,000 cases of TB detected each year, DRC is among the countries which contain 80% of the global TB burden. DRC is also among the 27 countries with 85% of the global burden for mortality related to multidrug-resistant tuberculosis (MDR-TB). The TB burden in the country is detailed in Table 1, below.

Table 1: Estimated TB burden in DRC, 2015

Population 2015: 77 million	Number (thousands)	Rate (per 100 000 population)
Mortality (excludes HIV+TB)	51 (30–77)	66 (39–99)
Mortality (HIV+TB only)	16 (13–20)	21 (17–26)
Incidence (includes HIV+TB)	250 (162–357)	324 (210–463)
Incidence (HIV+TB only)	39 (23–57)	50 (30–74)

Data are as reported to WHO Global TB Report 2016. Estimates of TB and MDR-TB Burden are producted by WHO in consultation with countries. Generated: 2016

HIV infection in DRC is generalized, with a prevalence of 1.2% in the general population.[1] HIV prevalence is higher among women (1.6%) than men (0.6%) and key populations such as female sex workers (6.9%) and men who have sex with men (16.9%) are most affected by the epidemic. DRC is among high-burden TB countries (WHO Report, 2016). It is also one of the 27 global high burden MDR-TB countries, responsible for 85% of the global estimates.

Screening TB patients for HIV in the country has slowly increased since 2008. The problem of national expansion is directly linked to the availability of the care package for the management of co-infected patients: cotrimoxazole preventive therapy (CPT) and antiretroviral treatment (ART). The government policy is to introduce HIV counseling and testing only in health facilities where these drugs are available (at the health facility or at a district level facility). The PNLT and PNLS recommend that all persons living with HIV (PLHIV) should be screened for TB.

In 2015, the PNLT reported that the proportion of all TB patients tested for HIV was only 48.9%, and among tested TB patients 12.11% were found to be HIV positive. However, of these, 78.5% were on CPT and 66.6% were on ART. Table 2 shows the trend of HIV testing and care among all notified TB patients from 2008 to 2015.

[1] *DHS 2014, UN Reports UN-DRC, UNAIDS Reports*

Table 2: DRC HIV-related activities for patients with all forms TB, 2008-2015

Year	# TB patients notified	TB patients with an HIV test result %	TB patients HIV positive %	TB patients on CPT %	TB patients on ART %
2008	108,215	20%	18%	0%	0%
2009	115,625	27%	20%	45%	21%
2010	118,636	24%	18%	24%	9%
2011	114,290	27%	16%	54%	42%
2012	112,619	31%	16%	61%	40%
2013	111,881	44%	16%	71%	46%
2014	116,894	46%	14%	79%	67%
2015	120,508	48.9%	12.11%	78.5%	66.6%

Furthermore, according to 2015 data collected in the three PEPFAR provinces, about 84% of TB patients were tested for HIV. Of those tested, 17% were HIV positive and 80% received CPT. Seventy-two percent of those tested received ART in comparison to 50% of TB patients tested for HIV in 2014 in the same CPLT of which only 65% were on ART. WHO recommends that all TB patients with HIV should be started on ART regardless of CD4 count.

To address this gap, CTB supported the CPLTs in the implementation of their collaborative TB/HIV activities. These collaborative TB/HIV activities strive to create a mechanism to collaborate between TB and HIV programs, reducing the burden of TB among PLHIV and reducing the burden of HIV among TB patients.

During year 2 the MSH office in Kinshasa houses the PEPFAR funded project staff who operate directly at the national level and support the CPLT (Coordination Provinciale Lèpres Tuberculose) and the BPC/PNLS (Bureau Provincial de Coordination du PNLS) KIN. The MSH office in Lubumbashi houses another group of CTB staff who work both with the CPLTs du Haut-Katanga and Lualaba and secondly with the Provincial Health Division (DPS), the Health Zones (HZ), the civil society organizations (LNAC, CAD, FFPLUS), provincial coordination, ProVIC+ and IHP+ and all of the other partners involved in the field of TB and co-infection TB/HIV (the Damien Foundation and implementing partners (IPs) PEPFAR: Integrated HIV Congo Program, CARE International Centre for AIDS and treatment programs, FHI360, the Elizabeth Glaser Pediatric AIDS Foundation [EGPAF] and Population Services International).

Table 3, below, shows the trend of HIV testing and care among all notified TB patients from five CPLTs of three PEPFAR DRC provinces in 2015.

Table 3: TB/HIV activities for all form TB patients in CPLTs of PEPFAR provinces, 2015

CPLT	TB cases notified in 2015 in 3 CPLT	TB cases counseled on HIV (Conseil et dépistage initié par le prestataire [DCIP])		Patients with an HIV test result		HIV test +		Patients on CPT		Patients on ART	
		#	%	#	%	#	%	#	%	#	%
KIN	20,346	19,473	95.7%	18,941	97.2%	2,378	12.5%	1,744	73%	1,629	68.5%
LLB	2,830	1,712	60.4%	1,166	68.1%	305	26%	288	94%	248	81%
HKT (Haut Katanga)	8,063	7,040	87%	6,196	88%	1,065	17%	988	93%	858	80.5%
Total	**31,239**	**28,225**	**90%**	**26,303**	**84%**	**3,748**	**14%**	**3,020**	**80.5%**	**2,735**	**72%**

The global CTB project, funded by USAID provides technical and financial support to DRC's PNLS and PNLT DRC. Initially, the project was designed to support PEPFAR in 54 HZs in the three PEPFAR provinces in five CPLT. After the first year of implementation, following the rationalization process by the MoH through the PNLS, the project was entrusted with another mission to ensure the coordination of TB/HIV activities that IPs IHP + and ProVIC+ lead in KIN, Lualaba and Haut-Katanga provinces. This coordination enabled the intervention to exist in 21 health zones including five in KIN (Kinshasa City), eight in Lualaba (Kolwezi) and eight in Haut-Katanga (Lubumbashi).

The project aims to:

- Contribute to increased testing and treatment (CPT, ART) of HIV to over 90% of TB PLHIV in PEPFAR/CTB areas. This objective is being finalized through the expansion of the training and coordination of collaborative activities and strengthening the clinical mentoring of health providers on TB/HIV. CTB contributed to the improvement of the TB/HIV by supporting IPs (IHP+ and ProVIC+) in the implementation of their TB/HIV activities in the PEPFAR provinces they support, and the implementation of their joint action development plans with these partners. Support activities through local community organizations to fight TB (CAD, LNAC, FFPlus, etc.). This is accomplished by supporting treatment for TB and ART, active case-finding and tracing patients who default from treatment and bringing them back into care. Figure 2 below shows the geographic project areas, with CTB PEPFAR funded areas in brown. Table 4 (see below) details CTB TB/HIV activities in three target cities in DRC.

Figure 2: CPLTs supported by CTB and MSH, 2015-2016

CTB MSH

CTB UNION

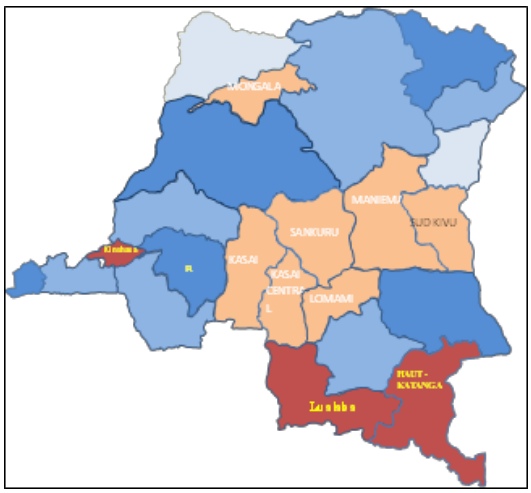


Table 4: Details on CTB support in three major cities in DRC, three provinces, 2016

N°	Province	Town	Population	CPLT	CTB activities TB/HIV	HIV prevalence in TB patients 2015 (PNLT)	Adults HIV prevalence 2015 (PNLS)
1	**KIN** National capital city	Kinshasa	11,587,000	**KIN**	TB/HIV activities in five health zones	**12.5%**	**1.6%**
2	**Lualaba** Large mining activities, post-conflict region	Kolwezi	453,147	**LLB**	TB/HIV activities in eight health zones	**26%**	**3.1%**
3	**Haut- Katanga** Large mining activities, post-conflict region	Lubumbashi	1,786,397	**HKT**	TB/HIV activities in eight health zones	**17%**	**2.2%**

The implementation of year 2 activities began following approval of the work plan in February 2016. CTB was not able to implement all of the activities that were planned due to the late start and the subsequent lateness of the approval of the NGOs' scope of work and the signing of their contracts.

The implementation plan for year 2 included the following:

1. Meetings with each NGO partner to review the SOW and ensure that all parties clearly understand what work is required
2. The finalization of terms of reference for the NGOs' activities (their contracts were approved on March 31, 2016)
3. Establishment of coordination TB/HIV bodies at the national and provincial levels
4. Organization of an internal coordination meeting with the implementing partners of PEPFAR HIV activities
5. Quarterly TB/HIV coordination meetings with CPLT and PCB/PNLS staff including all of the implementing partners in the field of TB/HIV in KIN, Lubumbashi and Kolwezi
6. Organization of workshop to update the TB/HIV activity roadmap at the central level
7. The provision of funds to NGOs and the start of their activities
8. Implementation of the joint 21-day infection control evaluation mission in 21 health zones (3 people per visit to KIN, Haut-Katanga and Lualaba
9. Validation of TB/HIV data with CPLT/PCBs, site providers and health zones teams
10. Technical, logistical and financial assistance by PNLT and PNLS with participation from PEPFAR IPs in training site providers and the health zone management teams on the management of TB/HIV co-infection in Kinshasa, Haut Katanga and Lualaba provinces
11. Capacity building of NGO members relating to PNLT and PNLS guidelines updates
12. Technical, logistical and financial assistance in training maternity nursing capacity feeding centers on the early detection of tuberculosis and HIV among children
13. Technical, logistical and financial assistance in joint supervisions of health zones and management of sites by joint PNLT and PNLS provincial and national teams
14. Assessment on the use of INH prophylaxis in the provinces of Haut-Katanga and Lualaba
15. Completion of the TB/HIV data audits in the Haut-Katanga and Lualaba provinces

The year 2 workplan has been carefully aligned to the PNLT's "National TB Strategic Plan". The CTB strategic framework is focused on three objectives. Each objective has sub-objectives; results by objective/sub-objective are summarized below.

Table 5: CTB TB/HIV objectives and sub-objectives in DRC [2]

Objective 1: Improved access to quality patient centered care for TB, TB/HIV and MDR-TB :

Sub-objective 3: 3. Patient-centered care and treatment' instead

Objective 2: Prevent transmission and disease progression by:

Sub-objective 6: Implementing infection control measures

Objective 3: Strengthen TB service delivery platforms by:

Sub-objective 7 : Enhancing political commitment and leadership

Sub-objective 8: Comprehensive partnership and informed community involvement

Sub-objective 9: Ensuring quality data, surveillance and monitoring and evaluation

Sub-objective 11: Human resource development

3. Country achievements Objectives/Sub-Objectives

Objective 1: Improved access to quality patient centered care for TB, TB/HIV and MDR-TB services

Sub-objective 3. Patient-centered care and treatment

Interventions to improve the enabling environment were as follows:

	Activities planned	**Status**	**Observations**
	Establishment of coordinating TB/HIV bodies at national and provincial levels	Done	Facilitated the reconciliation of staff in the PNLT, PNLS and IPs active in the field of TB/HIV co-infection
	Reviving and strengthening of the collaborative TB/HIV framework at the central level and in the three provinces	Done	Allowed the PNLT and PNLS to obtain a TB/HIV roadmap and joint TB/HIV workplan
	Coordination of TB/HIV meetings with the CPLT and PCB/PNLS staff including all intervening implementing partners in the field of TB/HIV	Done	Allowed for the joint monitoring of collaborative TB/HIV activities by the PNLT, PNLS, IPs and other partners in the field

[2] These sub-objectives are not a part of approved Excel Workplan but still is a synthesis of what was developed in the body of the report and it is found in the narrative of the approved workplan

	Improving adherence to treatment for co-infected TB/HIV patients through community care and support services through the assistance of NGOs in the fight against TB and HIV	Done	Facilitated good therapeutic outcomes among co-infected TB/HIV patients (36 patients who had defaulted on treatment were brought back to treatment, 48 patients who came irregularly for their treatment were recovered and 5 TB/HIV patients were able to continue undergoing treatment at home)
	Capacity building of NGO members on PNLT updates and PNLS guidelines	Done	Enabled the increase of TB suspected cases, confirmed TB cases, co-infected TB/HIV cases and improved therapeutic outcomes
	Support joint training for the capacity building of providers and management teams of the HZ for proper management of TB and TB/HIV	Done	Improved detection, treatment, monitoring of diseases and the initiation of INH prophylaxis
	Support joint supervision visits of health zones and TB/HIV sites by provincial and national joint PNLT and PNLS teams	Done	Provider improvement in the management of co-infected patients. As a result of the supervision • Many PLHIV were put on CPT • Many TB patients were tested for HIV • TB screening for PLHIV improved (see TB/HIV data validation section)

Objective 2. Prevent transmission and disease progression

Sub-objective 6: Implementing infection control measures

Results 1: Assessment of infection control measures at TB/HIV sites

During the infection control assessment, missions conducted between May to July 2016, 206 sites were visited including 104 sites in Haut-Katanga, 58 sites in Kinshasa and 44 sites in Lualaba (see Table 6, below). The assessment brought to light weaknesses in the implementation of infection control measures in different TB/HIV sites and established a foundation for the creation of a development plan to measure infection control within the HZs and sites that were evaluated.

Table 6: Results of assessment of infection control measures at TB/HIV sites

N°	Outcome Indicators	Indicator Definition	Baseline (year/ timeframe)	Target Y2	Result Y2
11.1.3	# of sites assessed for TB infection control during the assessment missions and # of USAID PEPFAR-supported sites with written TB infection control plans, including defined roles and responsibilities for staff	This indicator measures the # of USAID PEPFAR-supported sites assessed	N/A	225 sites	91% (206 /225) 206 sites assessed out of 225 total sites during the reporting period None of the 206 sites visited had a TB Infection Control Plan

The following weaknesses were identified within the three provinces:

A) Management issues

- Insufficient staff trained in infection control
- Most sites do not have an infection control committee
- Absence of infection control guide
- None of the sites had a TB infection control plan 33/4,342 patients (0.75%) developed TB
- **B) Administrative issues**
- Lack of routine surveillance data on TB occurrence among the site staff

- The majority of sites do not have a waiting room reserved for coughing
- Coughing patients are generally not separated from non-coughing patients
- Most sites do not have displays on infection control measures
- Insufficient supply of masks and handkerchiefs at sites

C) Environmental issues

- 60% of sites had consultation and hospitalization rooms that were unventilated
- 90% of the sites keep the windows and doors closed and are unventilated during the day
- 80% of the sites have cramped laboratories
- 60% of premises do not have a good light intensity

D) Respiratory protection issues

- A majority of the sites visited did not have respirators
- The personnel are not trained in the use of respirators
- Most sites do not have surgical masks available

E) Management of biomedical waste issues

- Inadequate waste transport equipment in biomedical sites
- Lack of biomedical waste storage materials in the sites
- Insufficient material for biosafety in laboratories sites as well as good mattresses to meet the standards
- Poor quality or lack of incinerators in most sites

Recommendations

Programs with PNLT and PNLS CPLT and the BPC/PNLS

- Organize a training in infection control for staff at the TB/HIV sites
- Supply health zones with air purifying respirator (APR) mask and surgical mask

The Health Zones

- Support the implementation of infection control committees
- Monitor the assessment of the implementation of infection control measures in sites

TB/HIV sites

- Provide waiting rooms that are reserved for coughers
- Separate coughing patients from non–coughing patients in the waiting rooms
- Display infection control measures in sites
- Order masks and handkerchiefs for coughing
- Ventilate the consultation and hospitalization rooms and waiting rooms
- Keep the windows and doors open and airy during the day
- Periodic clinical TB screening among providers

Note: An infection control development plan is currently being created and will be presented to USAID at the end of December 2016.

Objective 3. Strengthen TB service delivery platforms

Sub-objective 7. Political commitment and leadership

Result 2: TB/HIV Coordination platforms

In accordance with the year 2 work plan, the CTB project supported the creation of four national coordination platforms for TB/HIV and three in the provinces supported by the project (see Table 7 below). CTB also supported the PNLT and the PNLS to develop a national roadmap and a joint action plan TB/HIV for each province. These TB/HIV platforms should meet quarterly to assess the level achieved in the implementation of these plans and discuss the solutions for the various problems encountered in the field.

Table 7: Results of the establishment of TB/HIV working group meetings

N°	Outcome Indicators	Indicator Definition	Baseline (year/ timeframe)	Target Y2	Result Y2
11.1.3	# national and provincial TB/HIV Work plan established and meeting at least quarterly	This indicator measures the number of TB/HIV coordinating bodies established Indicator Value: Number Level: National and CTB geographic areas	N/A	4	100% (4/4) of national (1) and provincial (3) TB/HIV coordinating bodies were established and met every quarter on TB/HIV management.

Results

At the end of year 2, four TB/HIV coordination platforms are available, one national and three provincial PEPFAR projects in each province (KIN, Haut Katanga and Lualaba). These platforms are comprised of delegates from both PNLT and PNLS programs, partners involved in the field of TB/HIV co-infection and other partner related services in the field (supply chain, quality assurance, and community activities).
Results of meetings:

- A national TB/HIV roadmap was developed
- Three joint TB / HIV work plans drawn from the TB-HIV national roadmap were developed in the provinces of Upper Katanga, Kinshasa and Lualaba Three joint TB/HIV provincial plans were developed in Haut-Katanga, Kinshasa and Lualaba provinces
- Nine maps were created documenting the quarterly progress of joint TB/HIV activities in KIN, Haut-Katanga and Lualaba
- Nine quarterly TB/HIV progress meetings were conducted in KIN, Haut-Katanga and Lualaba on the implementation of the work plan
- Nine lists of recommendations for the implementation of activities were created at the provincial level
- Joint trainings were conducted for 524 health care workers (276 males, 248 females)
  - 358 individuals were trained with IP financial support from IHP+ (36) and ProVIC+ (312) by a joint PNLT and PNLS team
  - 35 community members were trained in technical awareness

Result 3: Availability of national and provincial TB/HIV action plans

Four action plans were developed in the three provinces during April to May 2016. These action plans reflect the national roadmap and enable each province to adapt the roadmap to their province. During the first coordination meeting of each province, the Heads of Division, personally chaired the development of the plan with the participation of teams of two programs affected by TB/HIV co-infection, namely the PNLS and PNLS in addition to all of the other partners (IHP+, ProVIC+ Cordaid, SANRU, CDR, International Center for AIDS Care and Treatment Program [ICAP], EGPAF, CTB/MSH, and SIAPS/MSH) (See Table 8, below).

Table 8: Results of availability of national and provincial TB/HIV action plans

N°	Outcome Indicators	Indicator Definition	Baseline (year/ timeframe)	Target Y2	Result Y2
11.1.3	# national and provincial TB/HIV action plans	This indicator measures the number of National and provincial TB/HIV action plans Indicator Value: Number Level: National and CTB geographic areas	N/A	4	100% (4/4) of national (1) and provincial (3) TB/HIV action plans

Results

On March 25, 2016, a TB/HIV roadmap was developed at the central level. Fourteen staff members attended the meeting (2 females and 12 males). The workshop to create the roadmap was attended by PNLT, PNLS, the, CAG (Global Fund), ICAP, EGPAF, ProVIC+, IHP+, USAID, WHO, CTB/UNION and CTB/MSH. CTB role was to provide technical and financial support The work was carried out on the basis of the old TB/HIV roadmap for the period 2015-2017. The roadmap was updated to a new, 2 year roadmap (2016-2017) including activities for 2016 and 2017 (including activities which were not carried out in 2015 and those from all partners involved in the fight against TB/HIV co-infection). The new roadmap will be implemented jointly by the PNLT and PNLS and implementation has not yet begun.

National results of TB/HIV coordination meeting

In the context of strengthening the synergistic work between the IPs, an internal meeting of the TB working group was to be held every quarter involving members of both programs (PNLT and PNLS). The quarterly meetings were supposed to be attended by eight people. National TB/HIV coordination meetings were not held due to scheduling conflicts (See Table 9, below).

Table 9: National results of TB/HIV coordination meeting

N°	Outcome Indicators	Indicator Definition	Baseline (year/ timeframe)	Target Y2	Result Y2
11.1.3	# national coordination meetings conducted	This indicator measures the number of national coordination meetings conducted	N/A	3	0% (0/3) of national coordination meetings were conducted

Recommendation

Organize the first quarterly coordination meeting in the first quarter of 2017 and offer a snack to appease and encourage participants to participate in this meeting and encourage attendance.

Results of TB/HIV coordination meeting in the provinces

During year 2, CTB held three coordination meetings every quarter in the three provinces during quarters 2, 3 and 4. Coordination meetings on TB/HIV activities were held under the leadership of the Provincial Division of Health (DPS) and Provincial Health Inspections (IPS) with the CPLT and the BPC/PNLS and other partners involved in the fight against TB/HIV co-infection (Centers for Disease Control [CDC], CDR, MSH, ICAP, EGPAF, ProVIC+, IHP+ SANRU, LNAC, CAD, FFPlus) (see Table 10, below).

Table 10: Results of TB/HIV coordination meeting in the provinces

N°	Outcome Indicators	Indicator Definition	Baseline (year/ timeframe)	Target Y2	Result Y2
11.1.3	# provincial coordination meetings conducted	This indicator measures the number of provincial coordination meetings conducted	N/A	9	100% (9/9) provincial coordination meetings were conducted including three by provinces

Results

During the last two quarters of year 2, the CTB project funded three coordination meetings in the three PEPFAR funded provinces (KIN, Haut-Katanga and Lualaba). These TB/HIV coordination meetings were chaired by the DPS and the IPS with the participation of the CPLT and the BPC/PNLS and other partners involved in TB/HIV activities.

The meeting helped each of three provinces with their TB/HIV road map, TB/HIV quarterly workplan, and quarterly TB/HIV report written jointly by the CPLT, BPC PNLS and partners

Challenges of TB/HIV implementation

- No application of IPT in non-TB PLHIV patients in most sites
- The site providers are not sufficiently supervised by BCZS in TB/HIV co-infection
- No validation of the quarterly TB/HIV co-infection data by both coordination provincials (CPLT and BCP PNLS)
- Low integration of TB activities in volunteer counseling and testing (VCT) sites/DCIP (TB screening among PLHIV is unsystematic)
- The unavailability of TB/HIV data collection tools
- The unavailability of TB/HIV service coverage map showing the CSDT and CST; VCT/DCIP in Kinshasa

Recommendations /Actions taken:

To address the weaknesses in TB and HIV coordination, health zones and at the sites, the CTB project took the following actions in each health area and health center:

- Organize a joint supervision for technical support providers on TB/HIV co-infection
- Make tools and inputs available to sites for IPT and non-TB PLHIV patients
- Organize a workshop to validate the TB/HIV co-infection quarterly data of TB/HIV co-infection
- Partners should align data with TB and HIV programs and IPs involved in TB/HIV co-infection

- Ask other partners to not implement infection control measures (theoretical measurements) in the facilities without making their implementation known ahead of time
- Revitalize what has already been done by others
- Standardize infection control approaches initiated by CTB
- Educate co-infected patients on changing medications in July and quickly distribute Diovir N[3]
- Support health zones in quantifying their needs for rapid HIV tests and other inputs
- Supply all health areas and all treatment sites with pediatric and adult INH
- Brief and supervise providers on the implementation of preventive care guidelines (INH) for PLHIV
- Supply co-infection sites with data collection tools and management of co-infected cases through the coordination of TB (CPLT) or HIV (BPC/PNLS) in quarter 3 (July- September 2016)
- Partners should align data with TB and HIV programs and IPs involved in the fight against TB/HIV co-infection.

Photo 1: Participants in the TB/HIV coordination provincial meeting at Kinshasa, September 2016, Photo credit: Jean Ngoy

Photo 2: Participants in the TB/HIV coordination Provincial meeting at Lualaba, September 2016, Photo credit: Charles Muhadila

Sub-objective 8. Comprehensive partnerships and informed community involvement

Results 4: Community activities

During year 2, the NGOs CAD, LNAC and FFPlus implemented small awareness campaigns and contact investigation in 10 health zones in three provinces. As a result, they helped detect 19.7% of TB cases (697 out of a total of 3,535 TB cases) notified.

The formal contracts with all of the NGOs were signed on April 8, 2016. During year 2, the NGO's efforts resulted in 697 tuberculosis patients including 687 bacteriologically confirmed cases being counseled and tested for HIV. Eighty-four patients were confirmed as HIV+. These results were obtained as a result of training 35 NGO staff (11 females and 24 males).

[3] Please note that for HIV treatment, the country is switching to option B+ (Tenofovir), which means that during supervision visits we are required to explain to TB/HIV patients the benefits of Option B+

Table 11: HIV counseling and testing of TB cases notified via three case finding approaches

N°	Health Zone	Presumptive TB	TB cases (all forms) diagnosed per case finding appraoch							Counseled TB cases for HIV testing	TB cases tested for HIV	TB/HIV cases confirmed TB/HIV
			Contact cases investigation		TB cases detected routinely by members of Femme Plus		Mini awareness campaigns		Total			
			M	F	M	F	M	F				
1	**Femmes Plus**	1703	6	0	103	79	21	15	224	224	224	5
2	**LNAC**	2315	2	1	22	12	78	36	151	150	141	20
3	**CAD**	2608	48	35	65	31	86	57	322	322	322	59
Total		**6626**	**56**	**36**	**190**	**122**	**185**	**108**	**697**	**696**	**687**	**84**

The table above (11) shows that of the three approaches of detection of the TB cases used by the NGOs 312 patients, that is to say 45% were detected routinely, 293 or 42% by the mini-campaigns and 92 or 14% by the investigations of the patient contacts cases Tuberculosis.

Regarding improvements in treatment adherence, FFPlus members conducted 73 awareness sessions for TB patients in treatment in the CSDT and made 222 home visits to patients who were not coming to the health facility routinely for their treatment. On the other hand, OAC LNAC made 472 home visits and additional information, education and communications (IEC) to TB patients. During these home visits, the staff retrieved information on TB/HIV co-infected patients who had died before starting treatment. Through IT, the OAC assured that five TB patients in Ruashi HZ remained on treatment and managed to return 11 patients who were lost to follow up and 25 who were lost to follow-up in the Kampemba HZ (see Table 11, below). Lastly, CAD members in the province of Lualaba, conducted 65 IEC sessions in the CSDT and 117 home visits. They recovered 23 patients who were lost to follow-up, 25 patients who had defaulted on TB treatment, and obtained information about 10 patients who were on treatment for TB and had died.

Table 12: Results of community activities

N°	Outcome Indicators	Indicator Definition	Baseline (year/time frame)	Target Y2	Result Y2
1.1.1.	Number of HIV-positive adults and children receiving care and support services outside of the health facility (Direct service delivery).	This indicator measures the number of HIV-positive adults and children receiving care and support services outside of the health facility (direct service delivery).	N/A	N/A	Five adult patients are receiving care and support from the community organizations/organisation à assise communautaires (OAC) of LNAC in Ruashi health zone in the province of Haut-Katanga. This home treatment is of short duration and is only provided when the patient is unable to reach the health center. It is provided under the supervision of IT and is a directive of the PNLT. Since this community approach is limited to people who are bedridden, it is really difficult to have many cases under treatment outside of health centers in the context of TB

Sub-objective 9. Ensuring quality data, surveillance and monitoring and evaluation

Results 5: Increasing efficient use of IPT for PLHIV

During quarter 2, CTB organized an assessment on the use of Isoniazid preventive therapy (IPT) in the supported HIV and TB/HIV co-infection sites in the PEPFAR provinces (Katanga and Lualaba) which were benefiting from the support of IHP+ and ProVIC+.

In general, about 40% of sites implement the IPT guidelines, although half of the sites do not comply with all of the prerequisites before starting treatment. Providers were not sufficiently trained on IPT use among PLHIV and among pediatric close contacts of bacteriologically confirmed TB patients. Twenty-five percent of sites implementing IPT only provide it to PLHIV and another 30% only provide it to children (the remaining 45% provide IPT to PLHIV and children).

Evaluating the administration of IPT in May 2016 revealed that very few PLHIV patients received IPT in the PEPFAR funded provinces (1.63%).

Results

After the quarterly data validation, in July 2016, there were 19,121 PLHIV newly enrolled in care of whom 2,065 were started on IPT (10%) but in September 2016 there were 22,957 PLHIV enrolled of whom 3,722 were started on IPT (16.2%). See Table 13, below.

Table 13: Results of increasing use of INH in TB prophylaxis for PLHIV

N°	Outcome Indicators	Indicator Definition	Baseline (year/time frame)	Target Y2	Result Y2
1.1.1.	% of PLHIV newly enrolled in HIV clinical care who start IPT. (Technical assistance)	This indicator measures the % of PLHIV newly enrolled in HIV clinical care who start IPT (Technical assistance)	N/A	N/A	16.2% (3,722/22,957)

Recommendations

To improve the accessibility of PLHIV to IPT, the CTB project will conduct the following activities next quarter:

- Organize a one-day briefing on IPT for all supported HIV sites
- Supply 225 sites in 21 health zones supported by ProVIC+ and IHP+ with 100 mg and 300 mg of INH and management tools
- Mentor the management of sites supported by IHP+ and ProVIC+ in the screening and diagnosis of TB among PLHIV and recommend IPT for all patients without TB symptoms after a symptomatic screening. PLHIV patients with one or more signs of TB will be examined using GeneXpert
- Where there is a lack of GeneXpert, advise providers to proceed with the exclusion of TB by implementing a thorough clinical examination (beyond the major symptoms "3A and 3T") in addition to a chest X-ray and other related techniques (Ziehl Neelsen stain, Fluorescence, Mantoux)
- Organize the sample transport system and finance the transport from the CSDT to GeneXpert laboratories if the samples are negative
- Make recording and reporting tools on prophylactic INH available to all supported sites (these tools are already available to the PNLT)
- Update and extend algorithms to all CSDTs and CSTs

There are two issues with IPT: Accessibility and quality. To address quality, the CTB project organized a briefing for providers, following close supervision with technical support visits to boost INH use. In addition, CTB ensures the availability of INH at the TB/HIV sites and information tools for patient monitoring

Results 6: Results of audit of data quality

RDQA data produced by the sites is supported by ProVIC+ in Haut-Katanga and IHP+ in Lualaba. This RDQA exercise was attended through joint provincial coordination from the PNLT and PNLS teams. The results are detailed in Table 14, below.

N°	Outcome Indicators	Indicator Definition	Baseline (year/ timeframe)	Target Y2	Result Y2
11.1.3	Number of RDQAs conducted	This indicator measures the number of RDQA mission conducted by the joint teams from the two TB/HIV control programs (PNLT and PNLS) with one CTB staff.	N/A	2 RDQA missions conducted in the sites supported by ProVIC+ in Haut-Katanga and In the sites supported by IHP+ in Lualaba	100% (2/2) of RDQA missions conducted, including six sites in Lualaba and six sites in Haut-Katanga between August and September 2016 by the joint teams from the two TB/HIV control programs (PNLT and PNLS) and one CTB staff

Table 14: Routine Data Quality Assessment (RDQA)

Results

Twelve high patient volume sites were visited, including six in Lualaba province and six in Katanga provinces. The visits revealed the following at all of the high patient volume sites:

1. There were inconsistent TB/HIV reported data structures by BCZ, the CPLT, the BPC/PNLS and the IPs
2. There was an absence of and insufficient TB/HIV data collection standardized tools (TB screening forms, initial assessment forms, and forms supporting decision making on ARV)
3. There was a low readiness rate and completeness of data in most sites
4. There was an inability of providers to fill data collection tools
5. There was low data analysis at all levels
6. There was an absence of similarity between the data source documents (records, registers) and the reports submitted

Recommendations

1. Organize internal monthly data validation meetings at the site level and at the BCZ and then hold a quarterly validation of data meeting at the provincial level with the participation of CSDT; IS de ZS (Nursing supervisor of the health zone); the CPLT, BPC/PNLS and ProVIC+
2. Supply all sites with standardized data collection tools
3. Organize a quarterly visit to the sites to support the completion of tools and analysis for the joint supervision missions between the CPLT and BPC/PNLS
4. Reproduce and make the manual tools available
5. Ensure the timeliness and completeness of data

Result 7: Data Validation

The CTB project funded the organization of three data validation workshops. Three workshops were conducted in the fourth quarter at the provincial level in KIN, Lubumbashi and Lualaba (see Table 14, below). The workshops strive to consolidate and harmonize epidemiological data in light of case definitions for each disease, with the participation of providers, HZs management teams and staff from the CPLT, BPCs /PNLS and IPs. Participants in these workshops found that the HIV and TB data reported by the health centers is different from the data found in HZs, at the CPLT, at BPC/PNLS and through the IPs**.**

Table 15: Availability results - data validation workshops report [4]

N°	Outcome Indicators	Indicator Definition	Baseline (year/ timeframe)	Target Y2	Result Y2
11.1.3	# TB/HIV data validation workshops	This indicator measures the number of TB/HIV data validation workshops	N/A		33% (3/9) of TB-HIV data validation workshops

4 This is not part of CTB M&E plan, but it is an additional indicator that is still important to monitor the resolution of data gaps between health centers, HZs, TB and HIV coordination and IPs

	within 3 CPLT (Kinshasa, Haut Katanga and Lualaba) conducted at the provincial level	validations within 3 CPLT (Kinshasa, Haut Katanga and Lualaba) conducted in provincial level		Three TB/HIV data validation workshops conducted of in each PEPFAR province	were conducted of in each of the PEPFAR provinces

Results

These workshops were attended by HZ management teams, the IT management of sites, the delegates of IPs and were under the facilitation of DPS and two PNLT and PNLS programs at the provincial level.

In total, 76 people took part in these meetings (24 females and 52 males) in KIN, Haut-Katanga and Lualaba provinces. All of the critical issues have been addressed and appropriate solutions have been proposed.

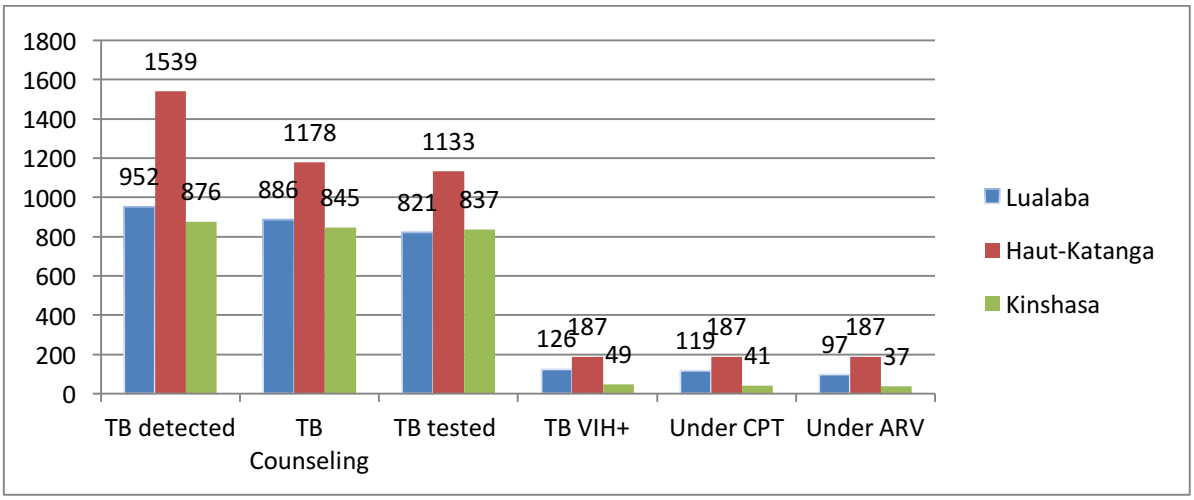
Data from different levels was compared with data in different registers of the management of sites and the differences have been corrected. The exercise resulted in improving the traceability of data between sites, central offices of HZs, and provincial coordination between both PNLT and PNLS programs. This project activity helped the PEPFAR IPs (IHP+ and ProVIC+) coordinate TB and HIV provincial partners to obtain validated data from 21 health zones in up to 784 TB/HIV patients detected by the methods of identification through TB and HIV door-to-door programs (See Table 16 and Figure 3, below).

Table 16: TB/HIV Data validated available through the door-to-door TB programs from 21 health zones in quarters 2 and 3

	TB detected	TB patients for HIV testing	TB patients for HIV testing	TB VIH+	Under CPT	Under ARV
Lualaba	952	886	821	126	119	97
Haut-Katanga	1,539	1,178	1,133	187	187	187
Kinshasa	876	845	837	49	41	37
Total:	3,367	2,909	2,791	362	347	321

Note: In this table 3,367 all form TB cases were detected from 21 PEPFAR health zones among which 362 TB/ HIV confected patients are reflected in this table. Less than 86% (2,909/3,367) of TB patients are counseled for HIV and 96% (2,791/2,909) were tested for HIV.

Figure 3: TB/HIV Data validated available through the door-to-door TB program from 21 health zones in quarters 2 and 3



This table shows that in Haut-Katanga the number of TB cases detected is high but fewer patients are tested for HIV and all TB/HIV co-infected are on ARV and CPT.

Table 17: TB/HIV data validated available by the door HIV program from 21 health zones in quarters 2 and 3

	PLHIV in care started on IPT	PLHIV screened for TB	TB HIV+	PLHIV on TB treatment	PLHIV started on IPT	PLHIV started on CPT
Lualaba	3,188	1,924	83	83	267	83
Haut-Katanga	13,736	6,822	298	298	1762	298
KIN	2,197	1639	49	48	76	49
Total	19,121	10,385	430	429	2,105	430

Note: Few PLHIV are screened for TB and all TB/HIV co-infected patients are on CPT. There is also poor performance in the number of PLHIV screened for TB in all of the provinces. There are many more people listed in the PLHIV registered than those who are screened.

Result 8: Supervision

The CTB project funded supervision visits by provincial joint TB and HIV team in the health zones supported by IHP+ and ProVIC+ in the three PEPFAR provinces in Haut-Katanga, KIN and Lualaba provinces. A total of 137 problem sites were visited during the quarter, including 58 in KIN, 39 in Haut-Katanga and 40 in Lualaba province. The results are detailed in Table 17, below.

Photo 3: Joint team supervision photo in visit at KIN province, April 2016, Photo credit: Jean Ngoy

Table 18: Results of joint supportive supervision visits

N°	Outcome Indicators	Indicator Definition	Baseline (year/ timeframe)	Target Y2	Result Y2
11.1.3	# of quality supportive supervision visits of clinics conducted from the central and provincial levels	This indicator measures the number of quality supportive supervision visits of clinics conducted from the central and provincial levels Indicator Value: Number Level: National and CTB geographic areas	N/A	Level: - 2 national and CTB geographic areas - 6 provincial and CTB geographic areas	100% (8/8) - 6 quality supportive supervision clinic visits conducted from the provincial levels to HZs and sites - 2 quality supportive supervision clinic visits were conducted from the national levels to provincial coordination, HZs and sites between May 2016 and September 2016 by the PNLT and PNLS.

Results

In general, the situation is similar among all of the sites and the following was observed:
TB/HIV activities are integrated in all health areas in the three PEPFAR provinces. The existence of data collection and reporting tools for TB and HIV (registers, records of patients) in all sites, the amount of the TB and HIV inputs, data transmission tools and reporting on TB and HIV are available. The old reports are properly filed quarterly review.

Strengths
• The management of co-infected TB/HIV patients is ensured in all zones
• TB patients are tested for HIV
• The screening of TB in PLHIV is completed in all health areas
• The labs are operational
• Presence of drugs and inputs management tools (stock cards)
• TB detection rate coupons resulted in 70% of expected quarterly target for TB patients detected
• The cascade of TB/HIV data is available

Weaknesses
• Low TB/HIV data rate promptness
• Low TB/HIV data completeness rate
• Mismatch of co-infected TB resulting from the door TB program and the door HIV program
• Low proportion of PLHIV patients on IPT
• Low proportion of HIV structures (VCT/DCIP) functioning as CST tuberculosis
• Inadequate supervision of monthly ECZ to the CSDT, CDV DCIP TBVIH
• Inadequate supervision of quarterly CPLT, BPC/VIH to BCZ (funding deficiency)
• Low proportion of samples of suspected TB PLHIV examined via GeneXpert
• 80% of incinerators for the disposal of biomedical waste not in good condition
• Stockouts of medicines, HIV test reagents and lab
• No stock of INH in all of the Central Bureau of Health Zones
• Presence of non-standardized tools in HIV VCT site DCIP
• Absence of specifications TBC suspected in HIV sites
• Lack of data collection tool for PLHIV on IPT in HIV sites
• Absence of suspected TB in the cohort register and unique canvas HIV

Challenges
• Training of all providers of the co-infection sites for the administration of IPT at the CSDT, CST and other support structures for HIV
• The exclusion of TB among PLHIV (inadequate GeneXpert machinery and ability to finance the transport of sputum samples from all supported sites to the CSDT and GeneXpert labs
• The application of IPT in PLHIV after knowing that an HIV patient does not have TB in all management structures of TB and HIV
• There are gaps in data reporting at the IPT registration sites.

Select recommendations:

Recommendations for the sites:
Recommendations for TB/HIV health centers

- Perform HIV testing on TB patients and confirm TB among PLHIV under ART in supported sites
- Provide IPT to all PLHIV who do not have TB
- Put all PLHIV confirmed TB cases on TB treatment
- ,

Recommendations for the HZs:
Regularly supply TB and HIV commodities to all TB/HIV sites to avoid stock-outs

- Organize monthly supervision visits in the CSDT TB/HIV
- Send the report to TB/HIV coordination unit
- Send the report with CSDT/TB/HIV summary quarterly data after consolidation between the CSDT and CST
- Develop a map of TB CST in each BCZS
- Integrate all VCT/DCIP sites in CST to research TB in all alleged curative consultation and all PLHIV
- Integrate IPT for PLHIV in all treatment centers

Recommendations for the coordinating unit on TB and HIV:

- Standardize HIV data collection tools at all sites
- Encourage the existence of specifications of alleged TB in the CST and CDV DCIP sites
- Make the INH data collection tool readily available
- Conduct quarterly TB and HIV inspections in all supported health zones
  Define the TB PLHIV suspected samples circuit and provide GeneXpert cartridges
- Make available to the BCZS the needed CSDT
- Harmonize records with clear columns in the register for patients who are diagnosed with HIV
- Organize trainings for ECZ members on the full package of HIV services and on TB/HIV infection control and regularly supply rapid HIV tests and INH to BCZS
- Archive the delivery notes on TBC drugs delivered to the CSDT and BCZS for proper drug supervision by ECZ
- Make the transmission TB/HIV report form available to the BCZS

Recommendations for the partner:

- Support the PNLT and the PNLS to organize workshops on the standardization of TB/HIV data collection tools
- Develop TB/HIV data collection tools as needed and provide TB and HIV provincial coordination offices with records, TB/HIV harmonized forms, and TB/HIV transmission report forms, regularly support joint supervision of TB/HIV activities by CPLT and BPC/HIV,
- Organize the training of ECZ members on targeted supervision on TB/HIV activities
- Organize training for ECZ members and providers on the management concepts of TB/HIV co-infection and infection control

Sub-objective 11. Human resource development

Support joint training for capacity building of providers and management teams of the health zones for proper management of TB patients and TB/HIV.

According to the approved work plan, during year 2, the project intended to strengthen the ability of suppliers of 80 co-infection sites in the three PEPFAR provinces.

The MoH has recommended a comprehensive HIV response package by one partner per HZ thus increasing the number of sites from 80 to 225 (including both private and religious structures) in the 21 health zones. As a result, there is more of a demand for training. The increase in treatment sites for TB/HIV co-infection after the process of rationalization has increased the number of individuals (from 360 to 717 participants) who should benefit from capacity building in the management of co-infection of TB/HIV with a focus on infection control measures and on technical quality assurance of HIV laboratories, To address this need, the CTB project will prioritize training on care activities that have a direct impact on critical project results (the management of co-infection site providers, TB and HIV, pediatric HIV and HIV laboratory quality assurance in close collaboration with HIV IPs).

During year 2, the CTB project financially, logistically and technically supported part of this training while another portion was funded by the IPs that the CTB project coordinates within the three provinces (ProVIC+ and IHP+).

During year 2, CTB organized a joint training on the management of TB/HIV co-infection of providers and ECZ health zones and sites in KIN and Lubumbashi supported by ProVIC+, as well as sites in Lualaba supported by IHP+.

The results of the trainings are detailed in Table 19, below.

Table 19: Numbers of providers and teams trained on TB/HIV co-infection

N°	Outcome Indicators	Indicator Definition	Baseline (year/ timeframe)	Target Y2	Result Y2
11.1.3	# of health care workers trained, by gender and technical area	This indicator measures the number of health care workers trained, by gender and technical area Indicator Value: Number Level: National and CTB	N/A	717 expected providers and health zone team members to be trained	73% (524/717) providers, including 228 females and 276 males from all of the sites have been trained on the screening and management of TB/HIV co-infection between June 2016 and September 2016 by the joint teams of facilitators from the two TB/HIV control programs (PNLT and PNLS).

		geographic areas			The training on infection control measures and laboratory quality assurance has been conducted

1. Challenge TB Success Story

DRC - Saving Lives Door-to-Door

Mwika Suzanne, age 37 and mother of three, lives in the town of Kampemba, in the city of Lubumbashi, Haut-Katanga Province of the Democratic Republic of Congo. For years she lived in despair with undiagnosed TB, she continued getting sicker and her family were sure that she would die. Kampemba is within a health zone where the TB detection rate was low due to a lack of awareness surrounding the disease.

Picture 4: Suzanne (left) at the time she began treatment

Challenge TB funded campaigns in the various health zones to improve the quality and access to care for TB and TB/HIV patients. They strengthened outreach by going door-to-door and by doing so the rate of TB detection has improved.

"The National League Against Tuberculosis and Leprosy (LNAC) came to see my neighbor who was undergoing treatment, and my sister asked that they come to my house", says Suzanne.

Martin, the coordinator of the LNAC in Lubumbashi said: "We found Suzanne after we visited another patient in the same area. We immediately collected a sputum sample which was tested at the hospital, but the results were negative".

"Given how sick Suzanne was, we decided to take her to the hospital for further testing. After a clinical examination and further sputum testing, she was diagnosed with both TB and HIV and remained at the hospital to undergo treatment. After several weeks she had regained enough strength to return home and continued treatment as an outpatient".

Picture 5: Suzanne (left) after three months of treatment

"Now I am much better and I am working again", says Suzanne, "I am so grateful, because it is through this campaign that I was found and treated. Previously my family had kept me at home and a traditional healer had treated me, but without any success. Now I am getting the right treatment and I feel so much better".

During the campaigns, 18 people including members of LNAC and community relays (volunteers who often provide health support on community activities) were briefed on sputum collection, the signs and symptoms of TB and on the use of collection tools. They then visited 3,838 homes, 15,299 people were screened, 1,387 people with TB symptoms were tested, and a total of 46 TB cases were ultimately diagnosed within the Kampemba and Ruashi health zones.

Suzanne is one example of the community outreach program's success. It is in light of this that a contract has been signed with LNAC whose objective is to improve the management, detection and treatment of TB and TB/HIV through the involvement of communities.

"We welcome this awareness campaign as it has boosted TB/HIV detection in our health zone and we believe this is an effective strategy. We will sustain it because there are many TB cases which are still to be found", said Dr. Hugues Kakompe, Chief Medical Officer of Kampemba.

2. Key Challenges during Implementation and actions to overcome them

Challenge	Actions to overcome challenges
Technical	
Implementation of community activities Due to the delays associated with the approval of the year 2 workplan, implementation of community activities was delayed.	HIV-IP/NGOs organized mini awareness raising campaigns in collaboration with the CPLT and BPC/PNLS to increase detection of patients with TB and TB/HIV.
Administrative	
Implementation of community activities Regarding the mandatory community care indictor, there were reporting challenges with regards to who should be treated outside of health facilities. In the context of TB, treatment is given according to the requirements of DOTS strategy by the providers at the health facility. Community-DOTS is reserved for bedridden patients who are unable to go to the hospital for treatment and is continued until the patient is able to return for treatment at to the health facility.	We suggest that the PNLT and the PNLS can raise this issue at the next national coordination meeting and find adequate solutions to enable co-infected patients to have stabilized access to TB drugs and ARVs via the community members who are responsible for following the patients through their TB treatment (at which point the patients will only need to continue on ART).
Low funding for capacity building of all providers in rationalization policy The increase in treatment sites for TB/HIV co-infection after the process of rationalization has increased the number of individuals (from 360 to 717 participants) who should benefit from capacity building in the management of co-infection of TB/HIV, on infection control measures and on technical	To address this, the CTB project will focus its training on care activities that have a direct impact on the production of critical results of the project. Specifically, it will focus on the management of co-infection site providers, on TB and HIV, pediatric HIV and on HIV laboratory quality assurance in close collaboration with HIV IPs.

quality assurance of HIV laboratories.	
Implementation of community activities Difficulty applying the Point de Distribution (PODI) community-based ARV distribution sites) in field.	We suggest that the donor allocate funds to facilitate community based ART. This would allow co-infected patients to access TB drugs and ART outside of health facilities.
The absence of the PNLS office in Kolwezi resolved by the involvement of DPS The absence of a provincial coordination office of the PNLS in the province of Lualaba posed serious problems for the implementation of joint TB/HIV activities in that province.	Following the CTB project discussion's with the head of DPS, there was a joint agreement to designate one of the department heads as the person responsible for TB/HIV activities pending the formal restructuring of the Provincial Health Division.
The delay in the approval of scope of work and the signing of contracts with NGOs Because of the delay associated with the approval of scopes of work for the NGOs, the project missed the opportunity to organize the celebration of World Tuberculosis Day on March 24, 2016.	To work around this situation, CTB suggests that the NGOs organize awareness raising campaigns in health areas in collaboration with the CPLT and BPC/PNLS as provided for in their workplans.
External dependencies The project is highly dependent on several factors outside of the project team's control. There are aspects of the project that entail critical dependencies like a vaccination campaign and net distribution campaign. The MoH calendar is very busy, which may determine whether the implementation targets and project outcomes are met.	CTB had developed strategies to mitigate risks associated with project dependencies and in collaboration with The Union and USAID, CTB will take steps to reduce the probability and/or impact of delays associated with the approval of the annual workplan. To overcome this situation, the project has updated the activity implementation plan by adjusting a schedule that takes into account the very important activities for which outcomes should provide clear guidance on the continued implementation of the year 2 project activities.

3. Lessons Learned

1. Training providers in TB/HIV coupled with follow-up visits through evaluation missions and supervision have facilitated an improvement in the use of INH in PLHIV because previously, despite PNLT/PNLS directives, availability of INH in the sites was limited.
2. Validation of TB/HIV data with the participation of site providers and ECZS delegates from both PNLT and PNLS programs (through the door-to-door program) is an excellent approach to obtain reliable data on the number of co-infected TB/HIV patients
3. Support to the TB/HIV PNLT/PNLS and partner coordination meetings allows provincial and national leaders in both programs to reach an agreed upon TB/HIV roadmap and facilitates the joint implementation of TB/HIV activities
4. The establishment of a framework for consultation between IPs working in the same areas is a good approach for the harmonization of interventions and prevents the duplications of funds for the same activities in the same location.
5. The PEPFAR funded IPs' collaboration with IPs PEPFAR has enabled the strengthening of TB/HIV activities in the PEPFAR sites (mostly the use of INH by PLHIV and training in TB/HIV co-infection)

Next Steps

During the first quarter of year 3, CTB's mini-annual workplan will focus solely on PEPFAR-funded TB/HIV activities implemented by the CTB project in the PEPFAR areas (Kinshasa, Lualaba and Haut Katanga). The project will end on December 31, 2016. The mini-annual workplan (October-December 2016) includes:

1. Support the CPLT and BPC PNLS to coordinate TB/HIV activities
2. To improve treatment care and adherence for co-infected patients, CTB will strengthen the capacity of community workers employed by NGOs in identifying persons with presumed TB and HIV, sputum sample collection, referral of samples or patient for diagnosis and care, and provision of patient support to maximize adherence to TB treatment, TB preventive therapy, CPT and ART, and proper documentation, recording an reporting for monitoring and evaluation.
3. To assure the effective use of IPT in preventing TB in PLHIV
4. To assure the sputum transport for GeneXpert
5. Promoting the use of GenXpert in the diagnosis of TB in PLHIV with presumed TB
6. Strengthening the monitoring and evaluation of collaborative TB/HIV activities in three provinces
7. Strengthening of the coordination of the TB/HIV co-infection activities

Mandatory TB/HIV indicators

1. Revive and strengthen the collaborative TB/HIV framework at the central and provincial levels

Table 20, below represents the coordination achievements at the national and provincial levels

Table 20: National and provincial TB/HIV coordinating bodies established and meeting during year 2

N°	Indicator	Target	Accomplishment (April-June 2016)				Total	% achievement	Comments
			National	Province					
				Haut-K	Kinshasa	Lualaba			

				at a n g a					
1	National and provincial TB/HIV coordinating bodies established and meeting at least quarterly	4	1	1	1	1	4	100%	The four platforms for coordinating TB/HIV activities are available (one national and three provincial in each PEPFAR province project). These platforms work well in facilitating the participation and implementation of planned TB/HIV activities
2	Availability of national and provincial TB/HIV action plans	4	1	1	1	1	4	100%	There are four joint plans. Three of the plans relate to the PNLS and PNLT's provincial coordination in Kinshasa, in Haut Katanga and in Lualaba, and one of the plans is at the national PEPPFAR level,. Data collection will be completed quarterly and monitoring will be done during the coordination meeting.

2. *Training and capacity building for improved management of TB/HIV (Data collection will be completed after training and reporting will be quarterly)*

Table 21, (below), gives a general overview of the numbers and the care providers trained in HIV/TB co-infection and gender during the second year of the CTB project.

Table 21. Number of health providers for TB/HIV co-infection trained in TB/HIV management by CTB

N°	Province	IPs	Providers trained with IPs funding			Providers trained with CTB funding			Total
			H	F	Total	H	F	Total	
1	Haut-Katanga	ProVIC+	100	94	194	33	10	43	237

2	Kinshasa	ProVIC+	48	80	128	26	22	48	176
3	Lualaba	IHP+	27	9	36	37	9	46	122
Total			**175**	**183**	**358**	**96**	**41**	**137**	**495**

3. *Quality supportive supervision visits of clinics conducted from the central and provincial levels*

Table 22 (below), describes the supervision completion rate planned in the PEPFAR provinces during the second year of the CTB project. Three supervision missions were scheduled for each quarter in the 3 PEPFAR provinces through IHP+ and ProVIC+. The CTB project supported the organization of three planned missions during quarter three (there were no missions during quarters one and two due to the late approval of the workplan and budget).

Table 22: Number of quality supportive supervision visits of clinics conducted from the central and provincial levels

	Q1(Oct-Dec 2015)		Q2(Jan-Mar 2016)		Q3(Apr-Jun. 2016)		Q4(Jul.-Sept 2016)		% Achievement	Comments
	Target	Accomplishment	Target	omplishment	Target	Accomplishment	Target	Accomplishment		
Central	**0**	**0**	**1**	**0**	**0**		**1**	**1**	**100%**	N/A
Haut-Katanga	**0**	**0**	**1**	**0**	**1**	**1**	**1**	**1**	**100%**	
Kinshasa	**0**	**0**	**1**	**0**	**1**	**1**	**1**	**1**	**100%**	
Lualaba	**0**	**0**	**1**	**0**	**1**	**1**	**1**	**1**	**100%**	
Total			**4**	**0**	**3**	**3**	**4**	**4**		

4. *Strengthen TB infection control*

Table 23 (below) illustrates the number of sites evaluated for TB infection control measures during the second year of the project. After the assessment, various TB/HIV PEPFAR sites were involved in the development plan for infection control.

Table *23: Number of USAID PEPFAR-supported sites assessed for TB infection control*

Province	Target	Q1(Oct-Dec 2015)	Q2(Jan-Mar 2016)	Q3(Apr-Jun. 2016)	Q4(Jul.-Sept 2016)	Comments
		Accomplishment	Accomplishment	Accomplishment	Accomplishment	
Haut-Katanga	108	0	0	104		
Kinshasa	58	0	0		58	
Lualaba	59	0	0	44		
Total	225	0	0	148	58	

5. Strengthen Monitoring and Evaluation

Table 24 (below) illustrates the achievements of the RDQA missions to the PEPFAR provinces. Two RDQA missions were conducted by members of the PNLT and PNLS (accompanied by CTB). The mission focused on TB HIV sites in Haut-Katanga and Lualaba provinces. Data collection will continue on a quarterly basis.

Table 24: Number of RDQA missions had been made by members of the PNLT and PNLS with CTB support

Province	Target	Q1(Oct-Dec 2015)	Q2(Jan-Mar 2016)	Q3(Apr-Jun. 2016)	Q4(Jul.-Sept 2016)	Comments
		Accomplishment	:omplishment	Accomplishment	Accomplishment	
Haut-Katanga	1	0	0	0	1	
Kinshasa	0	0	0	0		
Lualaba	1	0	0	0	1	
Total	2	0	0	0	2	

Improve adherence in TB/HIV patients through community-based care and support services (CARE-COMM-DSD)

This indicator posed a serious problem with the reporting of those treated outside of the health facilities. In the context of TB, treatment is given according to the requirements of the DOTS strategy,

i.e. treatment is given by the providers at the health facility. A community variant called community based DOTS is reserved for bedridden patients who are unable to go to the hospital and it is a short term DOT solution because it is assumed that the patient will eventually resume taking outpatient drugs when he/she becomes mobile again.

Increase of effective use of INH in preventing TB in PLHIV

Table 25 (below) presents changes in the INH access rate in the three PEPFAR provinces by including the percentage of PLHIV newly enrolled in HIV clinical care who started Isoniazid preventative therapy (IPT). (Technical assistance)

Table 25: Increase of effective use of INH in preventing TB in PLHIV (April-June 2016[5])

Province	Q1(Oct-Dec 2015)		Q2(Jan-Mar 2016)		Q3(Apr-Jun. 2016)		% achievement	Q4 (Jul.-Sept 2016)		% achievement	Comments
	Target: PLHIV in active file	PLHIV under INH	Target: PLHIV in active file	PLHIV under INH	Target: PLHIV in active file	PLHIV under INH		Target: PLHIV in active file	PLHIV under INH		
Haut-Katanga	**No Data**	**No Data**			**13,736**	**1,722**	**12.5%**	**14,028**	**2,355**	**16.8%**	
Kinshasa	**No Data**	**No Data**			**2.197**	**76**	**3.4%**	**5,427**	**700**	**12.8%**	
Lualaba	**No Data**	**No Data**			**3,058**	**267**	**9%**	**3,502**	**667**	**19%**	
Total				**0**	**18,991**	**2,065**	**10.8%**	**22,957**	**3722**	**16%**	

[5] Data not collected/available before April 2016

Table 26. TB-HIV cases detected and initiating First line TB treatment in three PEPFAR Provinces (FY16 SAPR Report - M&E Table: Q1: October- December 2015 and Q2: Jan-March 2016 data, Q3 April-June 2016, Q4: July-September 2016)

Table 26 illustrates the quarterly evolution of screening for TB/HIV cases and the initiation of first-line treatment in the three PEPFAR provinces.

Code MER	Indicator name	Haut-Katanga				Kinshasa				Lualaba				Total	Comments
		Q	Q	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
TB_STAT (N, TA)	**Proportion of registered new and relapsed TB cases with documented HIV status, during the reporting period.**	63	42	N/A	99.5%	71%	60%	91%	99.7%	87.5%	87.3%	98%	98%	83.6%	The data comes from the baseline data that the IPs (IHP + and + ProVIC) set in Datim for quarters 1 and 2.The data is validated and is already incorporated in the
	Number of registered new and relapsed TB cases with documented HIV status, during the reporting period.	27	13	N/A	886	789	549	1,748	896	294	318	353	414	6,657	

															Datim.
	Total number of registered new and relapsed TB cases, during the reporting period.	433	32	N/A	887	1111	912	1,909	898	336	364	360	424	7,959	
	TB_STAT (N, TA, Sex): New/Relapsed TB with HIV (Female)	17	65	N/A	348	404	215	705	364	177	167	195	206	3,017	
	TB_STAT (N, TA, Sex): New/Relapsed TB with HIV (Male)	10	71	N/A	538	385	334	1043	532	117	151	165	208	3,647	
	TB_STAT (N, TA, Age): New/Relapsed TB with HIV (<1)	1	1	N/A	0	5	12		3	0	0	1	1	24	
	TB_STAT (N, TA, Age): New/Relapsed TB with HIV (1-4)	8	1	N/A	3	27	24		36	1	2	3	9	114	
	TB_STAT (N, TA, Age): New/Relapsed TB with HIV (5-9)	10	3	N/A	5	8	8		36	8	7	4	15	104	
	TB_STAT (N, TA, Age): New/Relapsed TB with HIV (10-14)	10	2	N/A	4	10	9		28	12	7	17	12	111	
	TB_STAT (N, TA, Age): New/Relapsed TB with HIV (15-19)	20	14	N/A	17	25	12		92	51	17	31	19	298	
	TB_STAT (N, TA, Age): New/Relapsed TB with	23	11		857	133	121		70	222	285	297	358	3,323	

	HIV (20+)								1						
	TB_STAT (N, TA, Result): New/Relapsed TB with HIV (Positive)	54	39		751	17	17		821	92	81	82	69	2,023	
	TB_STAT (N, TA, Result): New/Relapsed TB with HIV (Negative)	23	97		136	191	169		75	202	237	283	345	1,965	
TB_ART (N, TA)	**Proportion of registered TB cases who are HIV-positive who are on ART**	89	59		86%	94%	71%	83%	100%	95.7%	98.1%	73%	67%	84%	This data come from the baseline that the IPs (IHP + and ProVIC +) set in Datim for quarter 1. The data is validated and is already incorporated inDatim.
	The number of registered new and relapse TB cases with documented HIV-positive status who are on ART during TB treatment during the reporting period.	48	23		251	105	51	237	75	517	271	420	141	2,139	
	The number of registered new and relapse TB cases with documented HIV-positive status during TB treatment during the reporting period.(Denominator)	54	39		253	123	93	284	75	540	276	579	211	2,527	
	TB_ART (N, TA, Sex): TB/HIV on ART (Female)	23	9		129	9	2		56	358	146	259	93	1,084	
	TB_ART (N, TA, Sex): TB/HIV on ART (Male)	25	14		122	7	10		58	159	125	174	48	742	
	TB_ART (N, TA, Age): TB/HIV on ART (<1)	1	1		0	0	0		0	0	1	0	0	3	

	TB_ART (N, TA, Age): TB/HIV on ART (1-4)	3	1		0	1	0		3	0	3	6	2	19	
	TB_ART (N, TA, Age): TB/HIV on ART (5-9)	1	0		0	1	0		4	13	2	2	6	29	
	TB_ART (N, TA, Age): TB/HIV on ART (10-14)	1	2		2	0	0		3	22	3	8	3	44	
	TB_ART (N, TA, Age): TB/HIV on ART (15-19)	1	2		11	2	0		4	89	19	26	1	155	
	TB_ART (N, TA, Age): TB/HIV on ART (20+)	41	17		238	12	12		100	393	244	397	129	1,583	
	TB_ART (N, TA, Known/New): TB/HIV on ART (Known at Entry Positive)	32	0		107	5	5		35	431	214	372	75	1,276	
	TB_ART (N,TA, Known/New): TB/HIV on ART (Newly Identified Positive)	16	23		143	11	7		79	86	57	78	66	566	
	TB_ART (N, TA, ART): TB/HIV on ART (< 8)	44	12		86	5	7		3	308	271	420	141	1,297	
	TB_ART (N, TA, ART): TB/HIV on ART (> 8)	4	11		87	11	5		111	211	0	0	0	440	

The data in the table above demonstrates that the proportion of registered new and relapsed TB cases with documented HIV status has increased significantly during the reporting period. The same increase can be observed among the proportion of registered TB cases who are

HIV-positive and on ART. CTB contributes to these improvements through technical and financial support in the implementation of the various activities of coordination, capacity building and monitoring and evaluation that the project has achieved the results documented in this report.